



ESCO Business

29 MAY 2019

ESCO as a suitable solution

ESCO
F2CO

Energy **S**ervice **C**ompany

“ An energy service company (acronym: ESCO or ESCo) is a commercial business providing a broad range of comprehensive energy solutions including designs and implementation of energy savings projects, energy conservation, energy infrastructure outsourcing, power generation and energy supply, arrange financing for projects and risk management for which performance contract and measurement and verification is a core part to ensure that the project technical performance is fully guaranteed during the contract period”

Range of ESCO Business Services

ESCO's Full Service

Energy Supply Contracting

Third Party Financing

Variable Term Contracts

One – Year Contracts

Supplier Credit

Equipment Leasing

**Consultant
with Performance Base Payment**

**Consultant
with Fixed Payment**

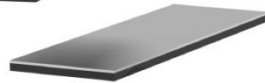


High Risk

"What's your
risk tolerance?"



Low Risk



ESCO's characteristics

What

.....is important
characteristics of an ESCO



ESCO's characteristics

Various definition & Wide range of services



When comparing or take figure about ESCO's number into consideration

ESCO offers:

M : Measurement & Verification

I : Integration through O&M

G : Guarantee



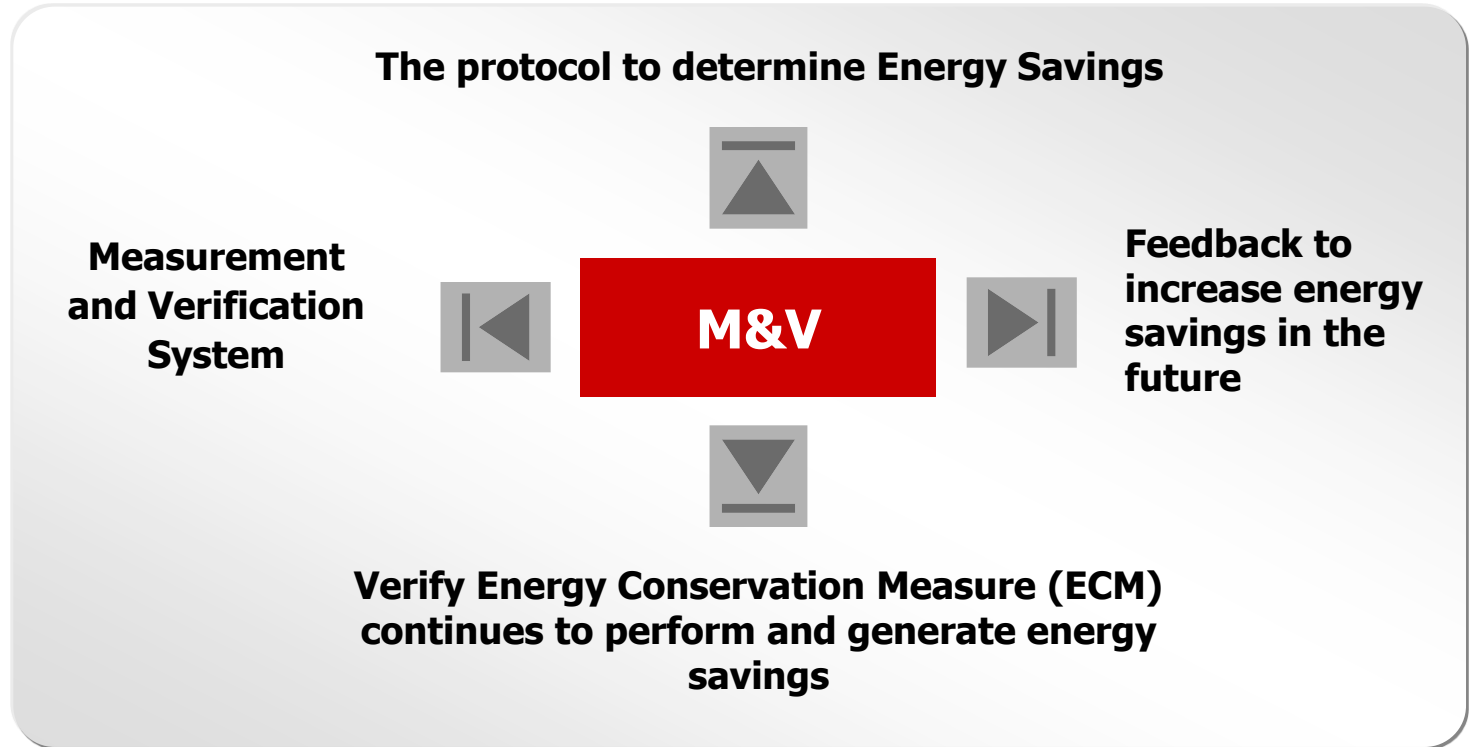
Financing is **NOT** considered as a key characteristic.

M : Measurement & Verification (M&V)



M&V Concepts:

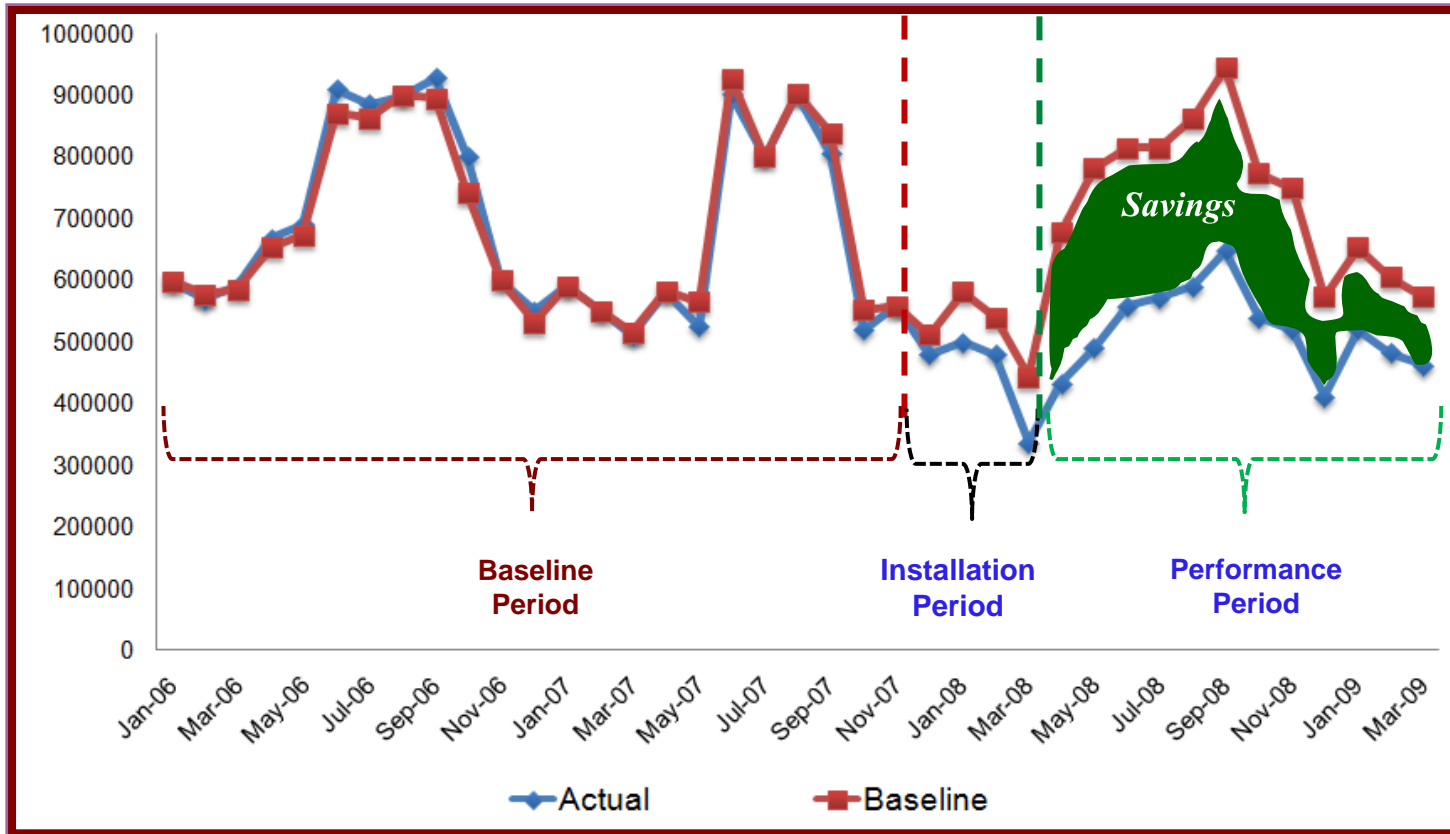
- Base on international standard protocol
- Flexible
- Optimization



Guideline for M&V

- ✓ **IPMVP** (International Performance Measurement and Verification Protocol)
(<http://www.ipmvp.org>)
- ✓ **FEMP** (Federal Energy Management Program of the U.S. Department of Energy)
(<http://www.eren.doe.gov/femp/financing/espc/measguide.html>)

M : Measurement & Verification (M&V)



**Higher Efficiency,
More Reliable, Less
Pollutions**

**Less Energy
Consumption, Less
Energy Expense,
Less \$\$\$**

Energy Savings = Baseline Energy Use - Post Installation Use

I : Integration through O & M



Additional ESCO Services



Providing or Arranging Financing



Operations and Maintenance



Training

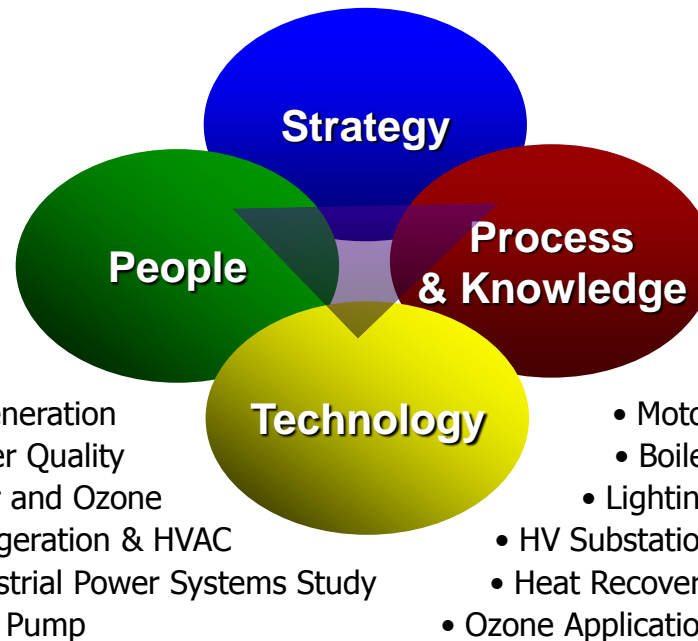
G : Guarantee

To successfully discover the value of ESCO business and ultimately deliver the value to client and country, an ESCO company needs to commit to the **Strategy** and drive it through the development of **People**, **Process**, and **Technology**.

- **Client Strategy** – Relationship & Trust
- **Market Strategy** – Shotgun, Clustering, or Segmentation, 4P, 7H
- **Product Strategy** – One fit all, or Tailored Made
- **ESCO Strategy** – Partnership, Alliance, PR, etc.

Human Resource:

- Executive
- Sales & Marketing
- Business Development
- Legal & Accounting
- Project Manager
- Engineer
- Specialist
- 3rd Party



- Cogeneration
- Power Quality
- Solar and Ozone
- Refrigeration & HVAC
- Industrial Power Systems Study
- Heat Pump

- Motor
- Boiler
- Lighting
- HV Substation
- Heat Recovery
- Ozone Application

Process:

- ESCO Business Process
- ESCO Technical Process
- ESCO Contracting Process
- ESCO Business Development

Knowledge:

- Financial Management
- Project Management
- Engineering & Technical
- Risk & Contract Management
- Customer's Decision Making and Procurement Practice
- Policy, Regulation, and Privileges

In ESCO Business, Technology is an enabler, an answer, but not the driver!

Technology enables and supports governance of alignment and adherence to the corporate strategy.

What's the difference?



Analyze energy consumption,
design and inspect construction



Advise financial arrangement



Equipment warranty



Guaranteed project's efficiency



Compensate for deficit



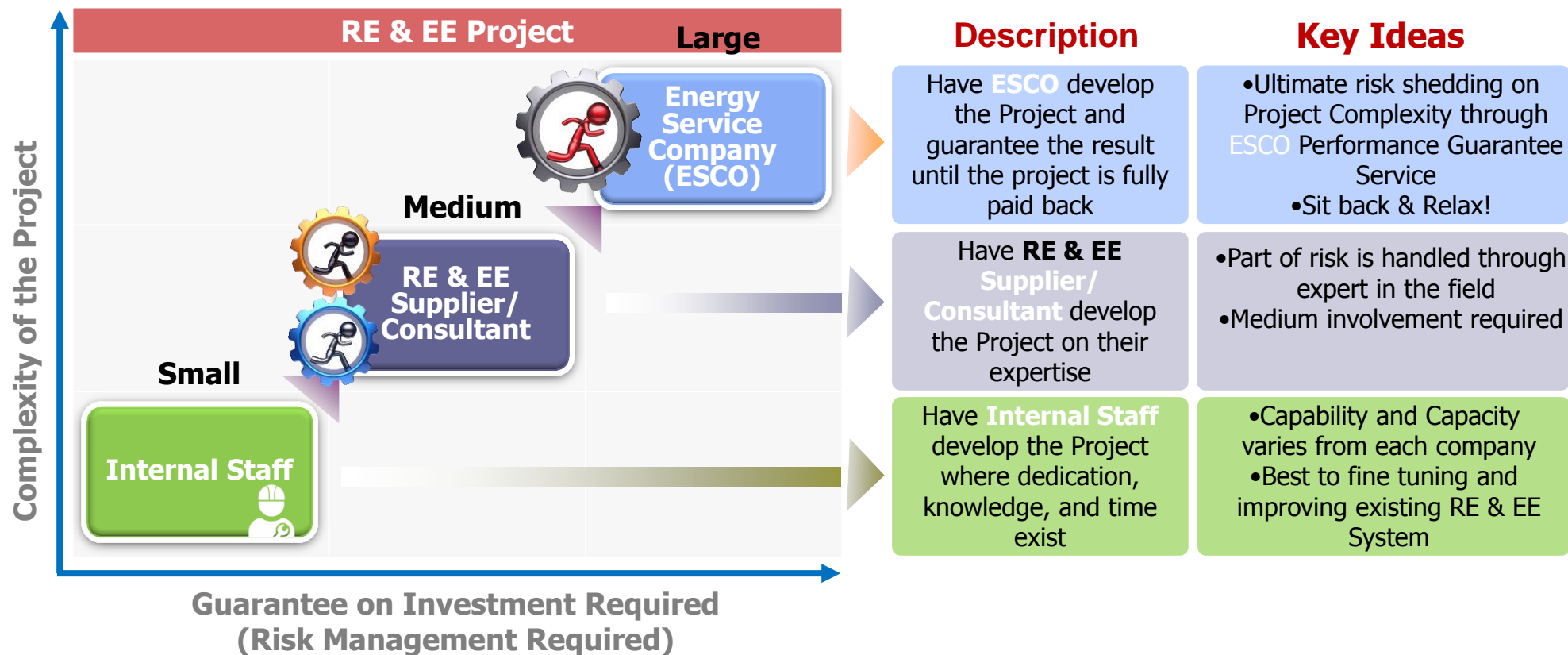
Measurement & Verification



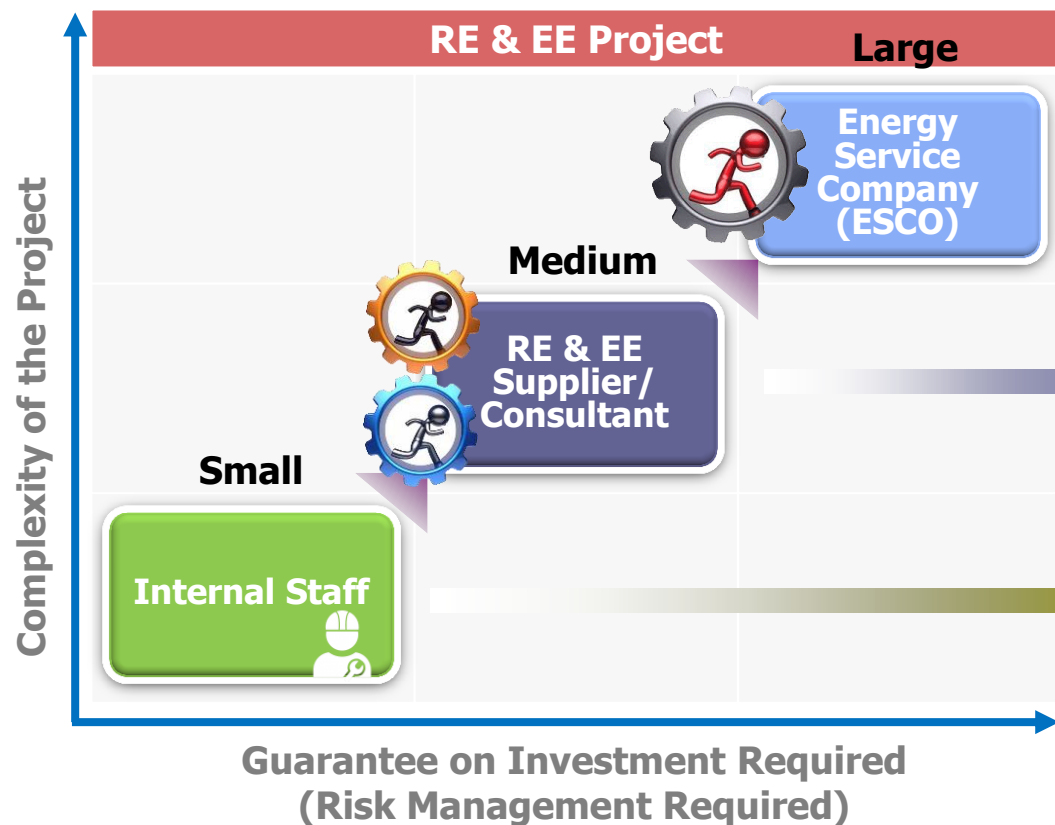
Operating and Maintenance



Who is the best choice ?



Who is the best choice ?



IMPORTANT !

- Accessibility to Financial Source
- Investment Priority
- Company's Investment Criteria and Condition (e.g. IRR, Payback Period)
- Capacity, Availability, and Capability of current staff and technical resource
- Executive Confidence Level on Project Success

ESCO Business Model

**Guaranteed
Savings**

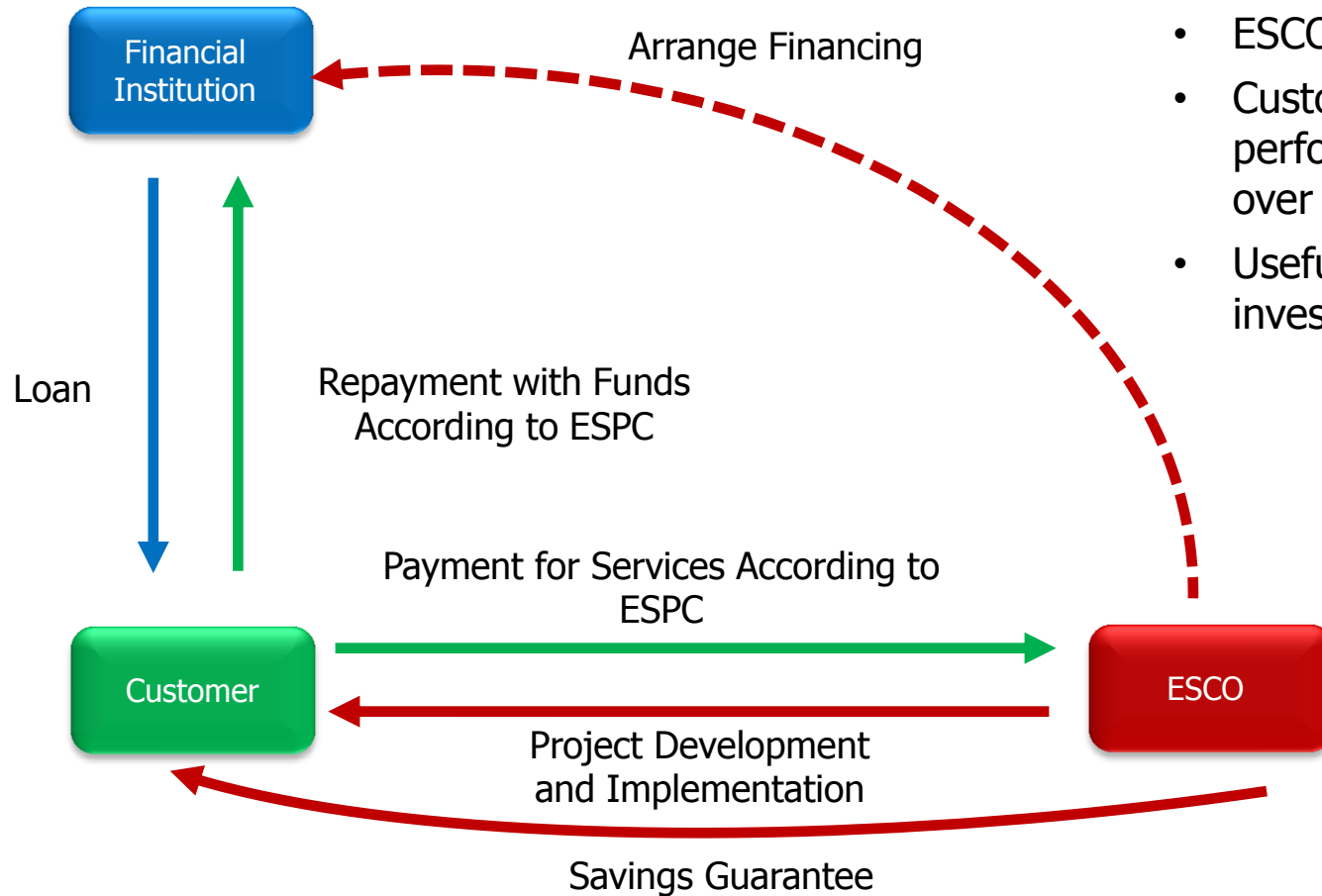
**Shared
Savings**



**Guaranteed Rebate
(CHAUFFAGE)**

ESCO Business Model

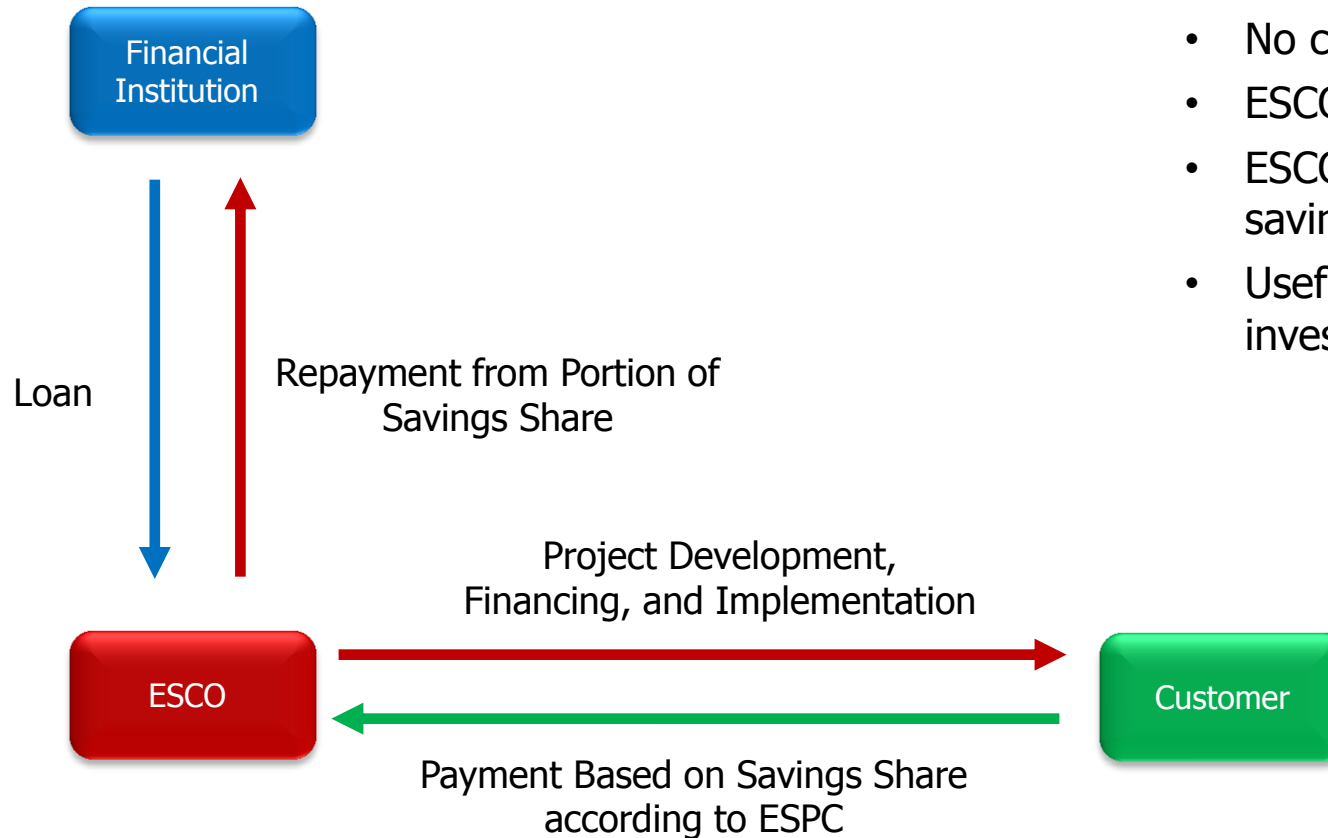
Guarantee Saving Model



- Customer finances project
- ESCO provides performance guarantees
- Customer pays ESCO upon satisfying performance Guarantees (one-time or over contract period)
- Useful when customer can invest/borrow funds at lower cost

ESCO Business Model

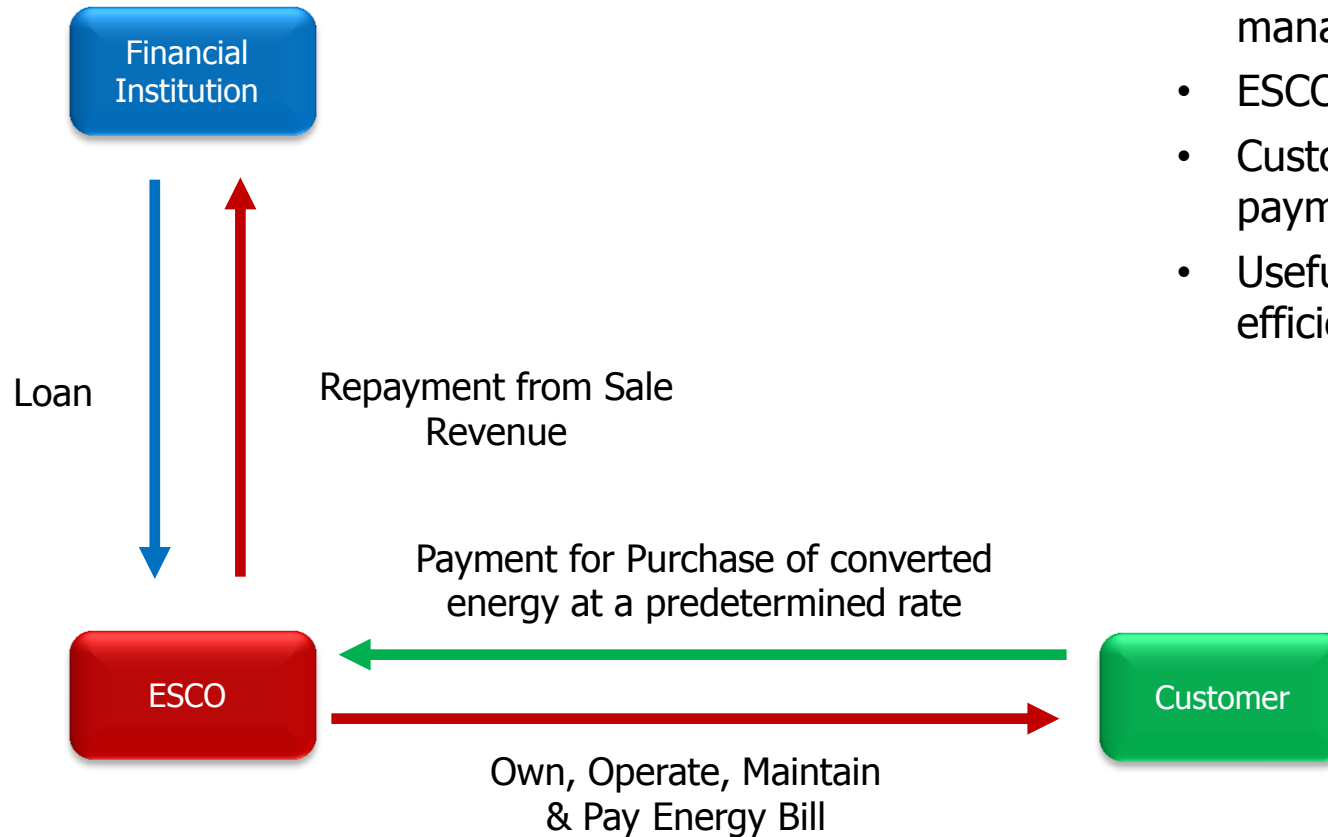
Shared Saving Model



- ESCO finances project
- No customer investment needed
- ESCO borrows funds from FI
- ESCO and customer defined share savings over contract period
- Useful when customer does not want to invest own funds

ESCO Business Model

Guaranteed Rebate (CHAUFFAGE)



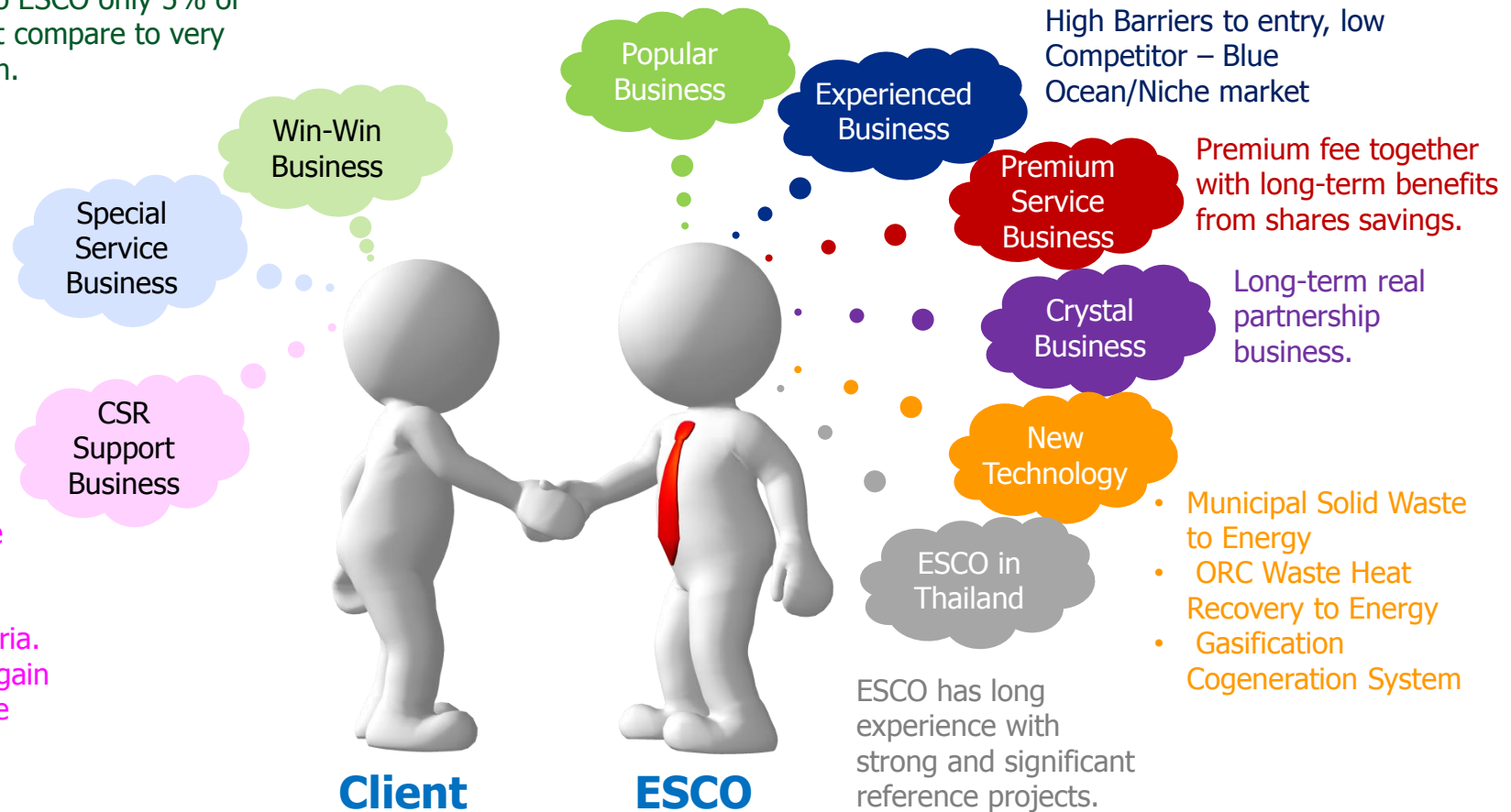
- Customer outsources energy management for entire facility
- ESCO invests in equipment/efficiency
- Customer signs long-term contract for payments at fixed price
- Useful when expert help is needed for efficient energy management

Good opportunities about ESCO Business

- Share Risk, Share Loss, Share Benefit
- Benefit Ratio is 19:1 (Customer : ESCO)
- Customer share to ESCO only 5% of net overall benefit compare to very high risk reduction.

Energy Business is still one of top rank business form continuous highly increase of energy price.

- Customer will have very low chance to gain “the guaranteed savings” if there is no ESCO support.
- ESCO revenue derives from the conversion of customer loss or waste.
 - Save energy, save world under the environmental conservation criteria.
 - High potential to gain additional revenue from CDM.





Thank you

For More Information Please Contact

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